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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,418	06/08/2000	MAMORU HORIKOSHI	Q58140	1158

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EXAMINER

STEADMAN, DAVID J

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/508,418	Applicant(s) HORIKOSHI ET AL.	
	Examiner David J Steadman	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 8 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 27 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Application

- [1] Claims 1, 8, and 27 are pending in the application.
- [2] Applicants' amendment to the claims, filed June 18, 2004, is acknowledged. This listing of the claims replaces all prior versions and listings of the claims.
- [3] Applicant's arguments filed June 18, 2004 have been fully considered and are deemed to be persuasive to overcome the rejections previously applied.
- [4] The text of those sections of Title 35 U.S. Code not included in the instant action can be found in a prior Office action.

Sequence Compliance

- [5] This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825; applicants' attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). To be in compliance, applicants should identify nucleotide sequences of at least 10 nucleotides and amino acid sequences of at least 4 amino acids in the specification by a proper sequence identifier, i.e., "SEQ ID NO:" (see MPEP 2422.01). If these sequences have not been listed in the computer readable form and paper copy of the sequence listing, applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper copy of the "Sequence Listing", as well as an amendment

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directing its entry into the specification, and a statement that the content of the paper and CRF copies are the same and, where applicable, include no new matter as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.821(b) or 1.825(d). See particularly the sequences disclosed at the bottom of pages 20 and the top of page 21 of the specification. It is noted that the sequence "GXGXXG" as disclosed at page 20, line 6 of the specification need not be identified by a sequence identifier as 37 CFR § 1.821 states that "[s]equences with fewer than four specifically defined nucleotides or amino acids are specifically excluded from this section" and that "'[s]pecifically defined' means those amino acids other than 'Xaa.'"

Specification/Informalities

[6] The use of the trademarks "Superscript™" and "pCR™2.1" have been noted in this application (page 21). They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

[7] Claims 8 and 27 are objected to in the recitation of "... 1H-pyrazole-3-yl)..." It is noted that, in the specification (page 6), the photobleaching herbicides are spelled as "... 1H-pyrazol-3-yl)..." While the recitation of "... 1H-pyrazole-3-yl)..." is supported in the

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original claims, i.e., this is not a new matter issue, it is not clear as to which of the intended spellings is correct. It is suggested that applicants reconcile the different spellings of the photobleaching herbicides reciting "...1H-pyrazole-3-yl)...."

[8] Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 27 is drawn to an isolated protoporphyrinogen oxidase from Nicotiana tabacum tolerant to photobleaching herbicide, comprising a polypeptide having the amino acid sequence of SEQ ID NO:2, wherein the photobleaching herbicide is selected from those recited in the claim. While claim 8 further limits the photobleaching herbicide to which the Nicotiana tabacum is tolerant, claim 8 does not further limit the claimed polypeptide as the Nicotiana tabacum polypeptide of SEQ ID NO:2 is inherently tolerant to all of the herbicides listed in claim 27. As such, claim 8 is improperly dependent upon claim 27.

[9] Claim 27 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Amended claim 1 is drawn to an isolated protoporphyrinogen oxidase (protox) from Nicotiana tabacum tolerant to photobleaching herbicide, comprising a polypeptide having the amino acid sequence of SEQ ID NO:2. The only difference between claims 1

and 27 is that claim 27 recites specific photobleaching herbicides to which the Nicotiana tabacum is tolerant. However, there is no difference in the scope of the polypeptides of claims 1 and 27 as the Nicotiana tabacum polypeptide of SEQ ID NO:2 is inherently tolerant to all of these herbicides. As such, claim 27 is a substantial duplicate of claim 1.

Claim Rejections - 35 USC § 112, First Paragraph

[10] In view of the amendment to the claims, the written description rejection of claims 1, 2, and 8 under 35 U.S.C. 112, first paragraph, as set forth in item [7] of the Office action mailed December 19, 2003, is withdrawn.

[11] In view of the amendment to the claims, the scope of enablement rejection of claims 1, 2, and 8 under 35 U.S.C. 112, first paragraph, as set forth in item [8] of the Office action mailed December 19, 2003, is withdrawn.

[12] Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 27 is drawn to an isolated protox from N. tabacum tolerant to photobleaching herbicide, comprising a polypeptide having SEQ ID NO:2, wherein the photobleaching herbicide is selected from among those recited in claim 27. One of the photobleaching herbicides, 1-methylethyl 5-[4-bromo-1-methyl-5-(trifluoromethyl)-1H-

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pyrazole-3-yl]-2-chloro-4-benzoate, has no support in the specification, claims, or drawings as originally filed.

Claim Rejections - 35 USC § 102

[13] In view of the amendment to the claims, the rejection of claims 1, 2, and 8 under 35 U.S.C. 102(a) as being anticipated by Lermontova et al. as set forth in item [9] of the Office action mailed December 19, 2003, is withdrawn.

[14] In view of applicants' arguments and the amendment to the claims, the rejection of claims 1, 2, and 8 under 35 U.S.C. 102(b) as being anticipated by Ichinose et al. as set forth in item [10] of the Office action mailed December 19, 2003, is withdrawn.

Conclusion

[15] Status of the claims:

- Claims 1, 8, and 27 are pending.
- Claim 1 is in condition for allowance.
- Claim 27 is rejected.
- Claim 8 is objected to for the reasons stated above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Steadman, whose telephone number is (571) 703-9042. The Examiner can normally be reached Monday-Friday from 7:00 am to 3:30 pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (571) 272-0928. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Art Unit receptionist whose telephone number is (703) 308-0196.

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David J. Steadman, Ph.D.

- Patent Examiner

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AK 08-04-04